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Subject Environmental Defense comments on Chloropyridine Derivatives (CAS# 68412-40-8)

(Submitted via Internet 1/18/05 to oppt.ncic@epa.gov, hvp.chemrtk@epa.gov, / boswell.karen@epa.gov, chem.rtk@epa.gov, MTC@mchsi.com, and ggarvin@dow.com)

Environmental Defense appreciates this opportunity to submit comments on the robust summary/test plan for **Chloropyridine Derivatives (CAS# 68412-40-8)**.

According to its most recent letter of submission, Dow AgroSciences, LLC, has finally submitted robust summaries for chloropyridine derivatives in response to EPA's High Production Volume (HPV) Chemical Challenge. The Sponsor has also submitted a set of robust summaries for 2,3,4,5,6-pentachloropyridine.

Our review of this submission indicates that the inadequate test plan submitted originally has not been revised and the robust summaries submitted for chloropyridine derivatives are totally inadequate. These robust summaries consist primarily of numerous pages of subject headings supported by no information. Among the limited information provided is a statement that "Chloropyridine derivatives is a stream containing chloropyridines". (Really!)

It is proposed that data for 2,3,4,5,6-pentachloropyridine be "leveraged" so that it might serve as a surrogate for chloropyridine derivatives. However, it is critical to note, as we pointed out in our review of the initial submission, that 2,3,4,5,6-pentachloropyridine is NOT an appropriate surrogate for chloropyridine derivatives. As a completely chlorinated molecule, 2,3,4,5,6-pentachloropyridine would be expected to be the least soluble, least reactive, least readily absorbed into the systemic circulation of mammals and most slowly metabolized of the chlorinated pyridines. Thus, less chlorinated pyridines may be significantly more toxic. The physicochemical properties of 2,3,4,5,6-pentachloropyridine will also differ significantly from those of the less chlorinated members of this group of chemicals.

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Another critical deficiency in this submission is its failure to include information regarding the composition of the chloropyridine derivatives stream. We understand that the content of the stream may vary slightly from batch to batch, but the content of this stream must be relatively well characterized in order for it to be used in the synthesis of pesticides, as described in the test plan. Characterization of the composition of the chloropyridine stream is also critical to assessing both the chemical and toxicological properties of the stream. Characterization is further critical to a determination of the relevance of any data proposed to be "leveraged" from 2,3,4,5,6-pentachloropyridine to predict the properties of the stream. That is, 2,3,4,5,6-pentachloropyridine may be a component of this chemical stream, but no evidence is provided to confirm if it is a major or trace component. Other, possibly more toxic, chlorinated pyridines are certainly components as well and most probably contribute to a greater extent to both its chemical and toxicological properties.

In summary, the test plan originally submitted for chloropyridine derivatives was inadequate and has not been improved. The revised robust summaries are deficient even in information that is readily available to the Sponsor and contain virtually no useful information on the chloropyridine derivatives stream. Therefore we urge the EPA not to accept this submission to meet the HPV Challenge.

Thank you for this opportunity to comment.

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